This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 (currently amended): A computer-implemented method for dimensioning a network based on Code Division Multiple Access (CDMA) techniques ~~or CDMA for input parameters that are representative of coverage requirements and/or capacity requirements and/or quality requirements able to provide at least a value of maximum sustainable load per cell given a plurality of services provided, the method~~ comprising ~~the steps of~~:

determining a load factor per cell ~~on the basis of~~ based on ~~the~~ input parameters for each cell;

verifying whether the determined load factor ~~corresponds~~ is equal to, less than, or greater than~~to the~~ a maximum load sustainable by the cell; and,

if the determined load factor exceeds the maximum sustainable load, dynamically negotiating, at ~~the~~ a Radio Resource Management level, radio resources to be allocated to at least ~~one of~~one of ~~the~~ a plurality of services provided by the network into the cell ~~in~~ such ~~a way~~ that the determined load factor per cell ~~becomes~~ is smaller than or equal to the maximum sustainable load.

2 (currently amended): The method as claimed in claim 1 wherein the determined load factor per cell is determined ~~by taking into account real "power control" procedures,~~ by attributing a normal or Gaussian distribution in decibels to ~~the~~ a ratio between a useful signal power and a total interference density of the cell ~~a normal or Gaussian distribution in decibels~~.

3 (currently amended): The method as claimed in claim 2, wherein the ~~step of~~ determining the load factor per cell is carried out for ~~the~~ an uplink radio path.

4 (currently amended): The method as claimed in claim 3, wherein the ~~step of~~ dynamically negotiating the radio resources to be allocated to at least ~~one of~~one of the services provided by the network in the cell comprises ~~the step of~~ dynamically negotiating one ~~among the functionalities~~ of

packet scheduling~~,~~;
congestion control~~;~~ and
admission control.

5 (currently amended): The method as claimed in claim 2~~,~~ wherein the ~~step~~ determining the load factor per cell is carried out for ~~the~~ a downlink radio path.

6 (currently amended): The method as claimed in claim 5~~,~~ wherein ~~the step of~~ dynamically negotiating the radio resources to be allocated to at least ~~one of~~one of the services provided by the network in the cell comprises ~~the step of~~ dynamically negotiating one ~~among the functionalities~~ of
code management~~,~~;
power management~~,~~;
packet scheduling~~;~~
congestion control~~;~~ and
admission control.

7 (currently amended): A computer-implemented method for dimensioning a network based on Code Division Multiple Access (CDMA) techniques ~~or CDMA for input parameters that are representative of coverage requirements and/or capacity requirements and/or quality requirements able to provide at least a value of maximum sustainable load per cell and a maximum number of radio channels associated with corresponding codes provided for a plurality of services provided, the method~~ comprising ~~the steps of~~:

determining ~~for each cell by means of "link budget"~~ a load factor per cell for each cell by means of "link budget" for ~~the uplink~~an uplink radio path;

verifying whether the determined load factor per cell corresponds to the maximum load sustainable by the cell~~, and if the outcome of the verification is positive~~;

if the determined load factor per cell corresponds to the maximum load sustainable by the cell, determining by ~~means of~~ "pole capacity" ~~the~~ a number of radio channels and ~~corresponding associated codes~~an occupation of a code tree for each cell for ~~the~~ a downlink radio path;

verifying whether ~~the codes provides~~ codes corresponding to at least one of a plurality of services provided by the network can be hosted ~~in the associated codes~~on the code tree; and,

if the ~~number of~~code tree cannot host all the codes, ~~associated codes exceeds the codes provided for at least one service,~~ dynamically negotiating, at ~~the~~ a Radio Resource Management level, radio resources to be allocated to at least ~~one of~~one of the services provided ~~the~~ by the network into the cell so as to update the maximum sustainable load.

8 (currently amended): The method as claimed in claim 7, further comprising: ~~the steps of~~

determining for each service a load factor per cell and corresponding values of power per channel for the downlink radio path;

verifying whether the power per channel of at least one service exceeds power limits prescribed for the service ~~and, if the power per channel of at least one service exceeds the prescribed power limits~~; and,

if the power per channel of at least one service exceeds the prescribed power limits dynamically negotiating the radio resources to be allocated to the service at the Radio Resource Management level so as to update the maximum sustainable load.

9 - 10 (canceled)

11 (new): The method of claim 1, wherein the determined load factor per cell is optimized by taking into account the characteristics of the network.

12 (new): An apparatus comprising:

a processor; and

a memory storing instructions that when executed, cause the apparatus to:

determine a load factor per cell based on input parameters for each cell;

verify whether the determined load factor corresponds to a maximum load sustainable by the cell; and,

if the determined load factor exceeds the maximum sustainable load, dynamically negotiate, at a Radio Resource Management level, radio resources to be allocated to at least one

of a plurality of services provided by the network into the cell such that the determined load factor per cell is smaller than or equal to the maximum sustainable load.

13 (new): The apparatus of claim 12, wherein the determined load factor per cell is determined by attributing a normal or Gaussian distribution in decibels to a ratio between a useful signal power and a total interference density of the cell.

14(new): The apparatus of claim 13, wherein determining the load factor per cell is carried out for an uplink radio path.

15 (new): The apparatus of claim 14, wherein dynamically negotiating the radio resources to be allocated to at least one of the services provided by the network in the cell comprises dynamically negotiating one of: packet scheduling, congestion control and admission control.

16 (new): The apparatus of claim 13, wherein determining the load factor per cell is carried out for a downlink radio path.

17 (new): The apparatus of claim 16, wherein dynamically negotiating the radio resources to be allocated to at least one of the services provided by the network in the cell comprises dynamically negotiating one of: code management, power management, packet scheduling, congestion control and admission control.

18 (new): One or more computer-readable media, that when executed by a processor, perform:

determining a load factor per cell based on input parameters for each cell;

verifying whether the determined load factor corresponds to a maximum load sustainable by the cell; and,

if the determined load factor exceeds the maximum sustainable load, dynamically negotiating, at a Radio Resource Management level, radio resources to be allocated to at least one of: a plurality of services provided by the network into the cell such that the determined load factor per cell is smaller than or equal to the maximum sustainable load.

19 (new): The media of claim 18, wherein the determined load factor per cell is determined by attributing a normal or Gaussian distribution in decibels to a ratio between a useful signal power and a total interference density of the cell.

20 (new): The media of claim 19, wherein determining the load factor per cell is carried out for an uplink radio path.

21 (new): The media of claim 19, wherein dynamically negotiating the radio resources to be allocated to at least one of the services provided by the network in the cell comprises dynamically negotiating one of: packet scheduling, congestion control and admission control.

22 (new): The media of claim 19, wherein determining the load factor per cell is carried out for a downlink radio path.

23 (new): The media of claim 22, wherein dynamically negotiating the radio resources to be allocated to at least one of the services provided by the network in the cell comprises dynamically negotiating one of: code management, power management, packet scheduling, congestion control and admission control.

24 (new): An apparatus comprising:

a processor; and

a memory storing instructions that when executed, cause the apparatus to:

determine a load factor per cell for each cell by means of "link budget" for an uplink radio path;

verify whether the determined load factor per cell corresponds to the maximum load sustainable by the cell;

if the determined load factor per cell corresponds to the maximum load sustainable by the cell, determine by "pole capacity" a number of radio channels and an occupation of a code tree for each cell for a downlink radio path;

verify whether codes corresponding to at least one of a plurality of services provided by the network can be hosted on the code tree; and,

if the code tree cannot host all the codes, dynamically negotiate, at a Radio Resource Management level, radio resources to be allocated to at least one of the services provided by the network into the cell so as to update the maximum sustainable load.

25 (new): The apparatus of claim 24, the instructions that when executed further cause the apparatus to:

determine for each service a load factor per cell and corresponding values of power per channel for the downlink radio path;

verify whether the power per channel of at least one service exceeds power limits prescribed for the service; and,

if the power per channel of at least one service exceeds the prescribed power limits dynamically negotiate the radio resources to be allocated to the service at the Radio Resource Management level so as to update the maximum sustainable load.

26 (new): One or more computer-readable media, that when executed by a processor, perform:

determining, at a computing device, a load factor per cell for each cell by means of "link budget" for an uplink radio path;

verifying whether the determined load factor per cell corresponds to the maximum load sustainable by the cell;

if the determined load factor per cell corresponds to the maximum load sustainable by the cell, determining by means of "pole capacity" a number of radio channels and an occupation of a code tree for each cell for a downlink radio path;

verifying whether codes corresponding to at least one of a plurality of services provided by the network can be hosted on the code tree; and,

if the code tree cannot host all the codes, dynamically negotiating, at a Radio Resource Management level, radio resources to be allocated to at least one of the services provided by the network into the cell so as to update the maximum sustainable load.

27 (new): The media of claim 26, that when executed by the processor, further perform:

determining for each service a load factor per cell and corresponding values of power per channel for the downlink radio path;

verifying whether the power per channel of at least one service exceeds power limits prescribed for the service; and,

if the power per channel of at least one service exceeds the prescribed power limits dynamically negotiating the radio resources to be allocated to the service at the Radio Resource Management level so as to update the maximum sustainable load.